Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) An inter-axle differential, comprising:

an input shaft disposed about a first axis;

an output shaft coaxial with said input shaft;

a spider coupled to said input shaft, said spider having a plurality of radially outwardly extending arms;

a plurality of differential gears mounted on said spider, one of said plurality of differential gears disposed about one arm of said plurality of arms;

a thrust washer disposed about said one arm, radially outwardly of said one gear;

a retaining ring disposed in a groove in said one arm radially outwardly of said thrust washer; and

first and second side gears in mesh with said differential gears, said first and second side gears configured to transmit power to first and second axles of a vehicle.

2. (Original) The inter-axle differential of claim 1, wherein said thrust washer includes a radially inner concave spherical surface and a radially outer surface having a recess formed therein.

3. (Original) The inter-axle differential of claim 1, wherein a radially outer surface of said thrust washer defines a recess configured to receive said retaining ring.

4. (Original) The inter-axle differential of claim 3, wherein said thrust washer includes a tab extending into said recess and into a gap formed in said retaining ring.

5. (Original) The inter-axle differential of claim 1, wherein said thrust washer defines a tab that extends into a gap in said retaining ring.

6. (Original) An inter-axle differential, comprising:

an input shaft disposed about a first axis;

an output shaft coaxial with said input shaft;

a spider coupled to said input shaft, said spider having a plurality of radially outwardly extending arms and at least one of said arms having:

a radially inner portion; and,

a radially outer portion;

said inner and outer portions substantially circular in shape and said outer portion defining flats;

a plurality of differential gears mounted on said spider, one of said plurality of differential gears disposed about said inner portion of said one arm;

a thrust washer disposed about said outer portion of said one arm, said thrust washer having a central bore shaped complementary to said outer portion of said arm;

a retaining ring disposed in a groove in said one arm radially outwardly of said thrust washer; and,

first and second side gears in mesh with said differential gears, said first and second side gears configured to transmit power to first and second axles of a vehicle.

7. (Original) The inter-axle differential of claim 6, wherein said thrust washer includes a radially inner concave spherical surface and a radially outer surface having a recess formed therein.

8. (Original) The inter-axle differential of claim 6, wherein a radially outer surface of said thrust washer defines a recess configured to receive said retaining ring.

9. (Original) The inter-axle differential of claim 8, wherein said thrust washer includes a tab extending into said recess and into a gap formed in said retaining ring.

10. (Original) The inter-axle differential of claim 6, wherein said thrust washer defines a tab that extends into a gap in said retaining ring.

11. (New) The inter-axle differential of claim 1 wherein none of said plurality of differential gears and said first and second side gears are disposed within a differential case.

12. (New) The inter-axle differential of claim 6 wherein a gap in said retaining ring is aligned with one of said flats in said radially outer portion of said at least one arm.

13. (New) An inter-axle differential, comprising:

an input shaft disposed about a first axis;

an output shaft coaxial with said input shaft;

a spider coupled to said input shaft, said spider having a plurality of radially outwardly extending arms and at least one of said arms having:

a radially inner portion; and,

a radially outer portion;

said inner and outer portions substantially circular in shape and said outer portion defining a flat;

a plurality of differential gears mounted on said spider, one of said plurality of differential gears disposed about said inner portion of said one arm;

a thrust washer disposed about said outer portion of said one arm, said thrust washer having a central bore shaped complementary to said outer portion of said arm;

a retaining ring disposed in a groove in said one arm radially outwardly of said thrust washer; and,

first and second side gears in mesh with said differential gears, said first and second side gears configured to transmit power to first and second axles of a vehicle.

14. (New) The inter-axle differential of claim 13 wherein said thrust washer includes a radially inner concave spherical surface and a radially outer surface having a recess formed therein.

15. (New) The inter-axle differential of claim 13, wherein a radially outer surface of said thrust washer defines a recess configured to receive said retaining ring.

16. (New) The inter-axle differential of claim 13, wherein said thrust washer includes a tab extending into said recess and into a gap formed in said retaining ring.

17. (New) The inter-axle differential of claim 13, wherein said thrust washer defines a tab that extends into a gap in said retaining ring.

18. (New) The inter-axle differential of claim 13 wherein a gap in said retaining ring is aligned with said flat in said radially outer portion of said at least one arm.